



Arlington Conservation Commission

Date: Thursday, December 5, 2024

Time: 7:00 PM

Location: Conducted by Remote Participation.

Please register in advance for this meeting. Reference materials, instructions, and access information for this specific meeting will be available 48 hours prior to the meeting on the Commission's agenda and minutes page. This meeting will be conducted in a remote format consistent with Chapter 2 of the Acts of 2023, which further extends certain COVID-19 measures regarding remote participation in public meetings until March 31, 2025. Please note: Not all items listed may in fact be discussed and other items not listed may be brought up for discussion to the extent permitted by law. This agenda includes those matters which can be reasonably anticipated to be discussed at the meeting.

Agenda

1. Administrative
 - a. Correspondence Received.
All correspondence is available to the public. For a full list, contact the Conservation Agent at concomm@town.arlington.ma.us.
 - b. Administrative Report.
2. Discussion
 - a. Elaine Crowder on Invasive Management and Restoration at McClennen Park.
 - b. George Parsons on Proposed Spy Pond Coring Study.
 - c. Water Bodies Working Group.
 - d. Tree Committee Update.
 - e. CPA Committee Liaison.
 - f. Park & Recreation Commission Liaison.
 - g. Symmes Conservation Restriction.

3. Hearings

DEP #091-0356: Notice of Intent: Thorndike Place (Continued from 11/21/2024).

DEP #091-0356: Notice of Intent: Thorndike Place (Continued from 11/07/2024).

The Conservation Commission will hold a public hearing under the Wetlands Protection Act to consider a Notice of Intent for the construction of Thorndike Place, a multifamily development on Dorothy Road in Arlington. Areas proposed to be altered include Buffer Zone to Bordering Vegetated Wetland and Bordering Land Subject to Flooding associated with Alewife Brook.

1. The Commission expects to continue this hearing to the meeting of December 19, 2024.



Town of Arlington, Massachusetts

Correspondence Received.

Summary:

Correspondence Received.

All correspondence is available to the public. For a full list, contact the Conservation Agent at concomm@town.arlington.ma.us.

ATTACHMENTS:

	Type	File Name	Description
▢	Reference Material	Correspondence_Received_-_ACROSS_Route_in_AGM_-_Mike_T.pdf	Correspondence Received - ACROSS Route in AGM - Mike T.pdf
▢	Reference Material	Correspondence_Received_-_Thorndike_Place_-_Coalition_to_Save_Mugar_Wetlands.pdf	Correspondence Received - Thorndike Place - Coalition to Save Mugar Wetlands.pdf
▢	Reference Material	Correspondence_Received_-_Thorndike_Place_-_John_Yurewicz.pdf	Correspondence Received - Thorndike Place - John Yurewicz.pdf
▢	Reference Material	Correspondence_Received_-_Thorndike_Place_-_Stephanie_Kiefer.pdf	Correspondence Received - Thorndike Place - Stephanie Kiefer.pdf

From: [David White](#)
To: [Mike T](#); [ConComm](#)
Subject: Re: Proposed ACROSS route in AGM
Date: Sunday, November 24, 2024 11:37:46 AM

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

I think the Arlington Select Board needs to be contacted.

I'm including the Arlington ConCom in this message.

David

On 11/24/2024 9:34 AM, Mike T wrote:

I am expecting to do a formal appearance at an upcoming ConCom meeting. Do we also need to get permission from the Selectboard?
Mike

On Sat, Nov 23, 2024 at 7:12 PM David White <dwhite@gilbertwhite.com> wrote:

Have passed this on to the Arlington ConCom. They may be able to take the lead with this,

David

On 11/23/2024 11:44 AM, Mike T wrote:

Hi folks

We've discussed this in the past a couple of times, but now the Lexington Greenways Corridor committee is ready to approach the Arlington authorities to gain permission to add a new ACROSS Lexington route that traverses a small part of AGM. I've attached for your review a PDF that will serve as a meeting presentation and standalone document supporting this process. Please respond with any questions and comments.

Have a nice holiday
MikeT



November 17, 2024

To Members of the Conservation Commission:

It is our understanding that the hearing scheduled for November 7th was continued due to outstanding comments from the peer reviewer, and BSC once again needing to amend their plans. While we acknowledge GZA needing to respond to questions raised by Scott Horsley and Mike Mobile at the October 24th hearing, BSC delivered their revised stormwater mitigation plan as their FINAL plan. BSC represented their numbers as reliable, their design as functional and in compliance. At that time, it was clear that Attorney Keifer anticipated to close the hearings that evening.

One would expect BSC to stand by their design and not have to revise it further! However, the continued questioning of the validity of BSC's data by ALT's experts raises significant concerns. As issues arise, there's never any certainty on BSC's part. It appears that BSC is repeatedly adjusting their data and numbers in an attempt to make this project work, rather than presenting a consistent and reliable analysis.

In particular, BSC's groundwater data is problematic and, in our view, erroneous. This is evident when compared with data from the Town's digitally monitored wells installed March 18, 2024. Even after missing several significant rainstorms, the Town's wells recorded water levels exceeding a 4-foot depth, while BSC has repeatedly asserted that the high-water table limit is 4 feet. This discrepancy calls into question the accuracy of the data BSC has used in its design and analysis.

The specific issues identified include:

- **BSC's Wells Installation Timing:** BSC's wells were installed *after* the peak of seasonal high groundwater, meaning they may not have captured the highest groundwater levels of the season.
- **Lack of Continuous Monitoring:** Unlike the Town's wells, which were continuously monitored, BSC's wells only recorded readings at specific points in time, failing to capture fluctuations that could be critical to understanding seasonal changes in groundwater levels.
- **Underestimation of Seasonal High Groundwater Levels:** The data from BSC's wells appears to have underestimated the seasonal high groundwater levels, which are essential for designing effective stormwater mitigation and ensuring the project's long-term viability.
- **Contradictory Data from Town Wells:** The Town's wells have shown that groundwater levels were on the decline at the time of BSC's well installation, which further questions the validity of BSC's conclusions.

Given these points, our position remains that the data provided by BSC is inaccurate and misleading. As a result, the proposed Thorndike Place development, based on this faulty data, poses a significant risk to the well-being of our neighborhood and our community. If there is any uncertainty or lack of confidence in the data and design, it is impossible to justify approval of this project, *with or without* conditions. Therefore, we respectfully urge the board to deny this project.

Thank you on Behalf of the Coalition to Save the Mugar Wetlands

Cc: James Feeney, Arlington Town Manager
David Morgan, Environmental Planner/Conservation Agent
Arlington Select Board
Arlington Land Trust

Your full name	Your address
Julie DiBiase	29 Littlejohn Street
Jeanette Cummings	32 Dorothy Rd.
George Michael Hakim	10 Edith Street, Arlington, MA, 02474
William Williams	110 Mary St.
Peter Fiore	58 Mott Street
Eva Bitteker	4 White St 02474
Sue Fish	18 White St, Arlington, MA 02474
Lauren Marsetta	4 Parker Street
Colin Marsetta	4 Parker Street
Nicholas & Marci Ide	152 Lake Street
Lisa Fredman	63 Mott Street, Arlington MA 02474
Matthew L McKinnon	9 Littlejohn Street
Drew Quinton	2 Mott St, Arlington MA
Marina	Popova
Yenhsi Liu	83 Dorothy Rd Arlington MA 02474
John Callinan	23 Parker Street Arlington, MA
Elaine Lyte	53 Dorothy Rd
Bríd Coogan	17 Edith St
Mark W. McCabe	4 Dorothy Road
Anna Y	Mott St, Arlington
Anthony Beckwith	26 Parker St
Pama Miller	43 Burch St
Jason Fligg	20 Parker St
Donna Vanderlinden	24 Littlejohn St
Linda Medwar	24 Littlejohn St
John Yurewicz	47 Mott Street, Arlington, Mass.
Kayla DiBiase	29 Littlejohn Street
Frank Pluck	17 Edith St
Deborah Barnes	40 Brooks Ave, Arlington, MA

Your full name	Your address
Robert DiBiase	29 Littlejohn St.
Vasanthi Viswanathan	50 Mott Street
Armen Dedekian	88 Brooks Avenue, Arlington
John DeLeo	65 Spy Pond Lane
Margaret Moody	78 Varnum St
Roisin Coogan Pluck	17 edith street
Neila Watson	216 Sylvia St Arlington MA
Riley Keyes	35 Ronald rd Arlington, MA 02474
Julia Zak	44 Upland Rd W
Emily Smith-Kaufman	198 Waverly St Arlington MA
Nancy N. Tiedeman	46 Bailey Road, Arlington,MA 02476
Cori Beckwith	26 Parker St
Meredith DiMola	47 Crosby St
Clarissa Rowe	137 Herbert Rd.
James Kinneen	35 Burch st
DONNA KELLY-WILLIAMS	110 Mary St
Sandra Miller	62 Herbert Road Arlington, MA 02474
Srinivas Viswanathan	50 Mott Street
Joshua Ayares	53 Colonial Drive
Cedrine J Bell	60 Spy Pond Lane
Addie Dublin	103 Spy Pond Pkwy
Matthew Potok	35 Princeton Rd Arlington MA 02474
Nancy Ulrich	27 Eliot Rd Arlington MA 02474
Mary McKenna Guanci	25 spy pond pkwy Arlington Ma
Susan Barry	61 Princeton Rd, Arlington, MA 02474
Kimberly Carney-Wong	100 Bay State Rd Arlington Ma 02474
Sara Subach	57 Princeton road, Arlington
Megan Recupero	71 Eliot Rd. Arlington MA 02474
Michael Williams	22 Wilson Ave

Your full name	Your address
Dennis Broughton	118 Mary Street
Felix wong	100 bay state rd, Arlington, ma 02474
Michael Manton	20 Colonial Drive, Arlington, MA, USA
Brian Battuello	22 Spy Pond Pkwy
Anita Gryan	47 Burch St

From: jspikey@comcast.net
To: [ConComm](#)
Subject: Fwd: Letter/Email to Con Comm
Date: Thursday, November 21, 2024 2:56:07 PM

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon,

My name is John Yurewicz. I am a frequent contributor to the cause against developing the Mugar Wetlands. The below letter was sent by me to others in the Save The Mugar Wetlands group and I was asked to forward this letter to the Conservation Commission.

Here it is.

Thank you.

John Y.

"Hi,

Can I assume that there is no underground testing going on now or even over the last few dry months? We're in the midst of a horrendous dry spell and underground testing now or recently would be a total waste!

That said, results from the testing done before the drought should be available now.

I must be missing something! I don't understand what could delay the determination that the site is a wetland and therefore unbuildable!

It has been a wetland since way before man stepped foot in this area!

It was a wetland when previous designs were created, submitted, and denied!

Nothing has changed other than the ever present risk of getting abnormally heavy precipitation and flooding due to the wide spread climate change enveloping our planet!

In retrospect, the proposed development has way more against it than just being a wetland and we've reviewed at least most of those strikes against development!

Sorry to be a noodge! But I fail to see what keeps this thing going!

Respectfully submitted.

John Y."

From: [Stephanie Kiefer](#)
To: [David Morgan](#); [Dominic R. Rinaldi](#)
Cc: [Chuck Tirone](#); [Susan Chapnick](#)
Subject: RE: October 24 Thorndike Presentation
Date: Wednesday, November 20, 2024 5:27:41 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

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David,

Thank you for providing the GZA Change Order. As the Applicant has consistently so done in the past, it will make prompt payment of the additional peer review fee as proposed in the GZA October 25 Change Order.

While I do not expect any additional peer review increases moving forward, I again am compelled to reiterate the importance of timely sharing all correspondence with the Applicant. The GZA Change Order document that you have just provided today, demonstrates that GZA submitted its Change Order to the Commission nearly one month ago - on October 25, 2024 - and that it was authorized on behalf of the Commission on October 30, 2024. There is no valid reason why this was not timely shared with the Applicant.

Here, not only was the GZA October 25 proposal not contemporaneously provided to the Applicant's representatives, but I specifically inquired of you about the undue delay in GZA submitting a proposal last week. In my email of November 15, I stated: "It was my understanding that at the last hearing, it was left that GZA was to have provided an update in its peer review proposal. To date, we have not seen such updated proposal and therefore have not been able to review/fund. If the Commission has received the same, kindly forward it to Dom and me. Accordingly, it is appropriate to continue the hearing until December 5. Thank you for your attention to these matters."

In response to that request, neither BSC nor I received the October 25 Change Order until today.

As with all our communications, kindly confirm that this correspondence has been included in Commission's file and likewise shared with the Commission prior to the Nov. 21 meeting so that there is no confusion as to why the additional peer review was not previously funded.

Thank you for your attention to this matter.

Regards,
Stephanie

Stephanie A. Kiefer, Esq.

East Mill, 120 Water Street, Suite 406

North Andover, MA 01845

Direct: 978.682.5220

skiefer@smolakvaughan.com | www.SmolakVaughan.com



Join the Conversation:



From: David Morgan <dmorgan@town.arlington.ma.us>
Sent: Wednesday, November 20, 2024 9:29 AM
To: Dominic R. Rinaldi <drinaldi@bscgroup.com>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>
Subject: RE: October 24 Thorndike Presentation

Thanks for clarifying. Please see the attached.

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Sent: Monday, November 18, 2024 10:32 AM
To: David Morgan <dmorgan@town.arlington.ma.us>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>
Subject: RE: October 24 Thorndike Presentation

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David,
Tony and I have spoken about the review/work, but we have never seen a proposal for the additional scope/fee GZA is requesting.

Dominic Rinaldi, PE (he, him)
Senior Managing Civil Engineer / Senior Associate
O: 617-896-4300 / D: 617-896-4386
drinaldi@bscgroup.com
www.bscgroup.com

From: David Morgan <dmorgan@town.arlington.ma.us>
Sent: Monday, November 18, 2024 10:27 AM

To: Stephanie Kiefer <SKiefer@smolakvaughan.com>; Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>
Subject: RE: October 24 Thorndike Presentation

Hi Stephanie,
Thanks for the clarification. GZA informed me that they'd been in touch with BSC directly, so I was under the impression that materials were in hand. Dom, can you please clarify what is needed to move forward?

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012

Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Stephanie Kiefer <SKiefer@smolakvaughan.com>
Sent: Friday, November 15, 2024 12:06 PM
To: David Morgan <dmorgan@town.arlington.ma.us>; Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>
Subject: RE: October 24 Thorndike Presentation

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Hi David,

It was my understanding that at the last hearing, it was left that GZA was to have provided an update in its peer review proposal. To date, we have not seen such updated proposal and therefore have not been able to review/fund. If the Commission has received the same, kindly forward it to Dom and me. Accordingly, it is appropriate to continue the hearing until December 5. Thank you for your attention to these matters.

Regards,
Stephanie

Stephanie A. Kiefer, Esq.
East Mill, 120 Water Street, Suite 406

North Andover, MA 01845
Direct: 978.682.5220
skiefer@smolakvaughan.com | www.SmolakVaughan.com



Join the Conversation:



**We have moved! Same building (East Mill) but different street address.
Please update your address book.**

As of August 23, 2024, you will find us at:
East Mill, 120 Water Street, Suite 406
North Andover, MA 01845

From: David Morgan <dmorgan@town.arlington.ma.us>
Sent: Friday, November 15, 2024 9:12 AM
To: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Subject: RE: October 24 Thorndike Presentation

Hi Dom,
I am following up to confirm you'd like to continue the hearing to 12/5. Please let me know at your earliest convenience.

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: David Morgan
Sent: Wednesday, November 13, 2024 10:37 AM
To: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Subject: RE: October 24 Thorndike Presentation

Hi Dom,
I am following up as today is the supplemental materials deadline for

the 21st. How are things looking for the hearing next Thursday?

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning
and Community Development | 781.316.3012

*Arlington values equity, diversity, and inclusion. We are committed to building a
community where everyone is heard, respected, and protected.*

From: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Sent: Tuesday, November 5, 2024 1:38 PM
To: David Morgan <dmorgan@town.arlington.ma.us>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick
<s.chapnick@comcast.net>; Stephanie Kiefer
<SKiefer@smolakvaughan.com>
Subject: RE: October 24 Thorndike Presentation

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Thanks David. Yes, we would like to continue to the 11/21 hearing. Please confirm receipt and that date. Thanks.

Dom

Dominic Rinaldi, PE (he, him)
Senior Managing Civil Engineer / Senior Associate
O: 617-896-4300 / D: 617-896-4386
drinaldi@bscgroup.com
www.bscgroup.com

From: David Morgan <dmorgan@town.arlington.ma.us>
Sent: Monday, November 4, 2024 11:25 AM
To: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick
<s.chapnick@comcast.net>; Stephanie Kiefer
<SKiefer@smolakvaughan.com>
Subject: RE: October 24 Thorndike Presentation

Hi again Dom,
I'm forwarding the SWCA peer review for your reference, which the Commission requested be integrated into the ISMP wherever SCWA indicated.

Cheers,

David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: David Morgan
Sent: Monday, November 4, 2024 10:57 AM
To: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Cc: Chuck Tirone <ctirone@ci.reading.ma.us>; Susan Chapnick <s.chapnick@comcast.net>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Subject: RE: October 24 Thorndike Presentation

Hi Dom,
I hear from GZA that you'd like to revisit some calculations ahead of the next hearing. At this point, are you looking to continue?

Cheers,
David

David Morgan | Environmental Planner + Conservation Agent | Department of Planning and Community Development | 781.316.3012
Arlington values equity, diversity, and inclusion. We are committed to building a community where everyone is heard, respected, and protected.

From: Dominic R. Rinaldi <drinaldi@bscgroup.com>
Sent: Thursday, October 24, 2024 8:59 PM
To: David Morgan <dmorgan@town.arlington.ma.us>
Cc: ConComm <ConComm@town.arlington.ma.us>; Stephanie Kiefer <SKiefer@smolakvaughan.com>
Subject: October 24 Thorndike Presentation

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

David,
Attached is a pdf of the presentation we gave at tonight's Conservation Commission hearing on Thorndike Place. Please let me know if you need anything else.

Dom

Dominic Rinaldi, PE (he, him)

Senior Managing Civil Engineer / Senior Associate

803 Summer Street, Third Floor / Boston, MA 02127

O: 617-896-4300 / D: 617-896-4386

drinaldi@bscgroup.com

www.bscgroup.com

BSC GROUP 



Town of Arlington, Massachusetts

Elaine Crowder on Invasive Management and Restoration at McClennen Park.

Summary:

Elaine Crowder on Invasive Management and Restoration at McClennen Park.

ATTACHMENTS:

	Type	File Name	Description
▢	Reference Material	McClennen_Present_24_Biodiversity.pdf	McClennen Report on Biodiversity.pdf
▢	Reference Material	Report-Fall24__Planting_for_Biodiversity_at_McClennen.pdf	Planting for Biodiversity at McClennen



McClennen Report Fall 2024

[Click](#) to view

Planting for Biodiversity

A photograph of a dense field of purple flowers, likely a wildflower meadow, with green foliage visible in the background.

Restore the Balance

What is biodiversity? ...



Biodiversity = many *types* of plants, animals and microscopic organisms, all performing select roles in a single location to form an interconnected ecosystem.



...and WHY does it matter?

- Biodiversity helps life in our open space thrive and adapt

More about biodiversity ...

Healthy ecosystems keep humans healthy.

Ecosystem services include:

- Grabbing carbon from air pollution and turning it to fresh oxygen
 - Turning wetlands into sponges ...
 - Balancing of the ecosystem
- People can breathe fresh, clean air
 -  flooding -  resilience
 -  pests & disease vectors



Ecosystems are like sports teams...

Several players assume certain roles to help the team compete. They work together.

- Forwards, defenders, goalkeepers in soccer are
↓ like ...
 - **Ecosystem Producers** (*plants*), **consumers** (*animals*), **decomposers** (*bacteria/fungi*)
- More than one player per role means, if one player leaves, another can step in.

But ... if too many leave, the team falls apart.

Biodiversity is LOST. The ecosystem breaks down.



Working with the Town to help
our open space gain diversity

**Working together so
our ecosystems win!**

Rationale ...

- 🌿 **Robust biodiversity** prevents ecosystem & food supply collapse
- 🌿 **Managing open space for biodiversity** is the challenging new frontier in Parks management embraced by the National Recreation & Park Association's [Environmental Resilience Pillar](#)
- 🌿 **Planting natives for biodiversity** at McClennen and other Arlington Parks moves closer to achieving state and global biodiversity [targets](#) such as
 - 🌿 | *Integrate Biodiversity into Decision-Making at Every Level* ([UN Target 14](#))
 - 🌿 | *Plan and Manage All Areas to Reduce Biodiversity Loss* ([UN Target 1](#))
 - 🌿 | *Restore 30% of All Degraded Ecosystems* ([UN Target 2](#))
 - 🌿 | *Reduce the Introduction of Invasive Alien Species by 50% and Minimize Impact* ([UN Target 6](#))

What we did ...

- **Spring 2024:** Planted **25** 🌳 **bare-root shrubs** from New Hampshire State Forest Tree Nursery - **\$42.50**
- **October 2024 Update:** All 25 🌳 native shrubs **survived** the July and Aug-Sept droughts with no hand watering! All protective cages remain in place.



We planted natives here ...



Native shrubs:



3 Elderberry | 2 Silky Dogwood |

10 Red Osier Dogwood |

5 Nannyberry (Viburnum) | 5 Aronia Berry



The plantings ...

Common Elderberry - 3 count
(*Sambucus canadensis*)



Silky Dogwood - 2 count
(*Cornus amomum*)



Red Osier Dogwood - 10 count
(*Cornus sericea*)



The plantings ...

Nannyberry - 5 count
(*Viburnum lentago*)




Aronia berry / Black Chokeberry - 5 count
(*Aronia melanocarpa*)







Proposal for approval

Preserve and Restore Open Space by Controlling Invasives and Planting for Biodiversity

- Continue the current work - **control woody invasives** (Winter 2024-25) -
- **Plant native flower, grass & sedge plugs** in the no-mow area surrounding retention pond
- Continue successful bare-root  shrub plantings (**Spring 2025, Order by Dec 2024**)
- **Remove large “specimen” multiflora rose (MFR)** behind pond (requires DPW assistance)
Replace with specimen shrub(s) - see proposal [here](#)
(e.g., highbush blueberry, button bush)

More info on biodiversity ...

1.  ***What is Biodiversity and Why Does It Matter for You?*** (Annie Bronez, 2021). Tulatin Soil & Water Conservation District [website](#).
2.  ***Kunming-Montreal Global Biodiversity Framework: 2030 Targets*** (with Guidance Notes) on the *Convention on Biodiversity* [website](#) - Outlines 22 point framework
3.  ***Promoting synergies between climate change adaptation and biodiversity*** [pdf](#) . On the UN Climate Change Conference [website](#).
Reviews the interconnections between biodiversity and climate change adaptation and explores the potential to foster synergies between the processes.
4.  Governor's Executive Order No, 618: **Biodiversity Conservation in Massachusetts** [text](#)
5.  **MA Fish and Wildlife Biodiversity Press Release & 5-year Strategic Plan**
 - [2.5](#) Build resilience through invasive plant removal
 - 2.5.1 Prioritize invasives management in daily operations



Report Fall 24: McClennen Park

Planting for Biodiversity, 2024

Removing invasives to make way for natives ...

Spring 2024: Planted 25 🌱 bare-root shrubs from New Hampshire State Forest Tree Nursery - \$42.50

October 2024 Update: All 25 🌱 native shrubs survived the July and Aug-Sept droughts with no hand watering! All protective cages remain in place.

Biodiversity Context: Robust biodiversity prevents collapse of ecosystems and our food supply.

Planting natives for biodiversity at McClennen and other Arlington parks is a start toward meeting important state and global biodiversity [targets](#). Our work addresses the open space biodiversity protections (inspired by UN Global Biodiversity [targets](#)) that over 23 states, including Massachusetts' [5-year strategic plan](#), have legislated to take effect in part at the local level. This is the challenging new frontier in Parks management embraced by the National Recreation & Park Association's [Environmental Resilience](#) Pillar. (see detail p. 2)

Possible Next Steps: 1) Continue woody invasives control, winter 2024-25; 2) Plant native flowers, grasses, & sedges in the no-mow surround for retention pond; 3) Remove large "specimen" multiflora rose behind pond (requires DPW assistance) & plant specimen shrub (e.g. high bush blueberry), w/ educational signage; 4) Continue successful bare root shrub plantings surrounding pond & wetlands (see detail p. 6).

ArMI Biodiversity Planting - Spring & Summer 2024

In Spring 2024, PRC and ConCom approved the ArMI proposal to plant 25 bare-root shrubs in McClennen Park wetlands. Arlington Land Trust agreed to buy the shrubs, acquired at the ultra low cost of \$1.50 per shrub.

🌱 **25 Bare-root Shrubs Planted - Cost \$42.50 (with shipping)**

3 Elderberry | 2 Silky Dogwood | 10 Red Osier dogwood | 5 Nannyberry | 5 Aronia Berry

Rationale for Plantings: Berry production for birds will be way down, given two years of bittersweet and multiflora rose cutting. We wanted to replace food supply by planting substantial numbers of berry-producing shrubs. Planting 5 species of native shrubs will not only increase plant diversity, but promote greater overall biodiversity, given the numerous butterflies, moths, birds, and mammals that will use these shrubs for food and protective habitat. In addition, the selection provides Fall color and berry interest for park visitors. Birds attracted by native berries will provide recreational bird-watching opportunities.

What We Did: Volunteers from the ***Arlington MA Invasives ArMI*** and the **Conservation Commission** made 25 chicken wire cages from donated wire to protect the plantings from rabbit browse, accidental public trampling, and accidental mowing by DPW. We planted the bare-root shrubs using the wedge planting technique to minimize soil disturbance. The sites were chosen to support the light and water requirements of the chosen shrubs. The idea was to choose spots in which these small shrubs would take root and survive without need of

watering. **All 25 shrubs survived two summer droughts without hand watering!**

The Bigger Biodiversity Picture: An exciting new frontier in Parks management is opening up: Preserve and restore open space while developing recreation accessible to all (*Nat. Rec & Park Assoc.* [Three Pillars](#) - Health & Well-Being – Equity – [Environmental Resilience](#)).

Robust biodiversity prevents collapse of ecosystems and our food supply. In 2022 the UN produced a 22 target *Global Biodiversity Framework* aimed at halting and reversing biodiversity loss by 2030-50 (<https://www.cbd.int/gbf/targets>). Yet “key land use decisions in this country that contribute to biodiversity loss are made at the state and local levels” ([Wilkinson 1999](#)). To counter loss, over [23 states](#), including Massachusetts, are creating biodiversity protections through legislative action, to take effect at the local level. Spurred by Governor Healy’s Exec. [Order #618](#) (*Biodiversity Conservation in Massachusetts*), MA Dept. of Fish and Game created a new [five-year strategic plan](#) (August 2024). It aims to preserve and restore biodiversity across Massachusetts open space in alignment with the UN’s Framework.

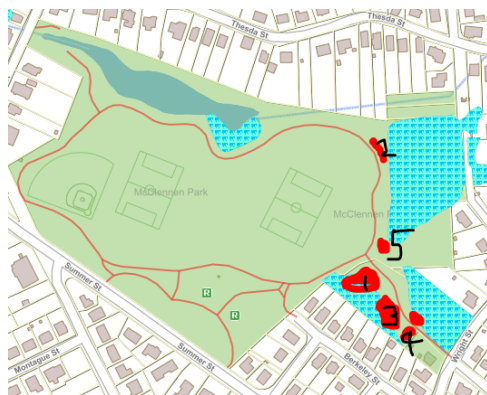
[UN Target 14](#) encourages all levels of government to integrate biodiversity values into decision-making - local, national and international. That is, local policies, regulations, planning, & development by Town departments, boards, and commissions should promote biodiversity across projects. The following UN targets are among goals planners in Arlington are being challenged to meet before 2030:

🌿 **TARGET 1: Plan and Manage all Areas To Reduce Biodiversity Loss**

🌿 **TARGET 2: Restore 30% of all Degraded Ecosystems**

🌿 **TARGET 6: Reduce the Introduction of Invasive Alien Species by 50% and Minimize Impact**

Planting for biodiversity at McClennen and other Arlington parks is a start toward meeting important state and global biodiversity goals. This is the challenging new frontier in Parks management embraced by the **National Recreation & Park Association’s** [Environmental Resilience](#) Pillar.



Planting Detail:

We planted in the five invasive control sites (# 1-5 left) containing rampant invasive bittersweet, multiflora rose with a smattering of other woody invasives. Sites were all along designated wetlands. **A sixth planting site** abutted the middle-front of the retention pond (not marked) within the 10 ft. no mow zone encircling the pond.

Images of Plantings - October 2024

Common Elderberry - 3 count (*Sambucus canadensis*)



Silky Dogwood - 2 count (*Cornus amomum*)



Red Osier Dogwood - 10 count (*Cornus sericea*)



Nannyberry - 5 count (*Viburnum lentago*)



Aronia berry / Black Chokeberry - 5 count (*Aronia melanocarpa*) - planted along retention pond



And just a reminder of the latest Winter 2024 work that preceded planting ...

Images from the 2024 Winter Season

Perhaps the craziest tangles of bittersweet vines dealt with were located along the edge of the main wetland area & across from the bench at the head of the Huntington Rd. Path in Area 5. Just look at these!

BEFORE: Our starting point in Winter 2023-24 was entangled with large bittersweet vines

And AFTER ... with climbing bittersweet CUT and CLEARED!

The area #5 tangle, anchored by a 7 inch diameter bittersweet trunk (see pic next page), was removed in a couple of hours in late February, one of those warm days in 2024 that was totally unlike a normal February.

Area #5 - Sawing a Tangle at Wetland's Edge



Area #5 AFTER!



Area #5 Tangle - Where to begin?



Area #5 AFTER!



The Prize! A vine 7 inches in diameter, age ~ 37 yr.

This massive bittersweet vine was at least 37 years old, according to growth rings!



Possible next steps to preserve and restore

- Continue woody invasives control winter 2024-25 - **preserve open space**
- Boost biodiversity by planting native pollinator flowers, grasses, and sedges in no-mow strip around retention pond and other wetlands areas - **restore open space**
 - Complete an **herbaceous plant inventory** to document what's present now
 - Restore native wetlands species
 - Start with the less populous species present now (e.g., blue verbena, a beautiful boneset, obedient plant, blue lobelia, cardinal flower, sedges etc.)
 - Add new wetland native flowering plants and grass to increase biomass and diversity of natives that support pollinators
 - Continue successful **bare root shrub plantings** surrounding pond and wetlands.
- Remove large “specimen” multiflora rose on backside of pond (requires DPW assistance) - **preserve open space**
- Plant native high bush blueberry with educational signage - **restore open space**